KANSAS DEPARTMENT OF AGRICULTURE

KANSAS NURSERY PEST NEWSLETTER

Plant Protection and Weed Control
Kansas Department of Agriculture
PO Box 19282, Forbes Field, Bldg. 282 **Spring 2009**
Topeka, Kansas 66619
www.ksda.gov/plant_protection/
Phone: (785) 862-2180 **FAX: (785) 862-2182**

Pest Problems

Bark Beetles: The Unseen Menace

Bark and ambrosia beetles are small to very small beetles that infest mostly woody plants. In Kansas, the beetles range in size from about 4.0 mm on the large side to 0.5 mm on the small side.

The beetles themselves are not often observed, as they hide in bark crevices and beneath the bark. First evidence of a beetle attack is usually the appearance of frass on the trunk or limbs.

The difference between bark and ambrosia beetles is that bark beetles feed on the woody portion of the plant whereas ambrosia beetles feed on fungus (ambrosia) introduced into the gallery system.

There are about 65 species of bark and ambrosia beetles in Kansas but there are only about six of great concern to the nurseryman and homeowner. Most of these beetles feed in stressed or dead trees and many confine themselves to the limbs**. The six top beetles in Kansas are the Granulate Ambrosia Beetle, Eastern 5-Spined Ips, European Elm Bark Beetle, Shothole Borer and two species of Ash Bark Beetles.**

The **granulate ambrosia beetle** is now present in at least the eastern half of Kansas. This insect has become one of the most common beetles trapped during trapping surveys. At times, thousands of beetles can be caught over a period of just a few days. This beetle will attack healthy as well as stressed trees. It confines itself to mostly small diameter material, but will attack the lower boles of larger stressed trees. Attacks on small trees often result in the death of the tree while on larger trees damage from the boring may cause cankers to develop. A few of the hosts of this beetle are: oak, elm, plum, sweet potato, pecan, peach, redbud and pear. Stored logs may also be attacked rendering the wood unsuitable for lumber. Control measures must be applied before the beetles seal the entrance hole with frass.

The **eastern 5-spined Ips** attacks stressed pines. Pines that are dug and maintained in a holding area until they can be sold are very susceptible to attack. First evidence of attack is the presence of frass in the bark crevices. Attacks by this insect can result in the death of the tree or it may further weaken the tree, inviting attack by other wood-boring insects. A species related to this beetle and recently detected in Kansas is the pine engraver. It remains to be seen if this insect becomes a pest in the state.

The **European elm bark beetle**, also known as the smaller European elm bark beetle, is the species responsible for the death of millions of American elms. This beetle spreads a fungus that closes off the vascular tissue resulting in the death of the tree. When a suitable tree has been found, the beetles release an aggregation pheromone attracting hundreds or thousands more beetles. Traps and pheromones are available for monitoring this pest. Fortunately elms now been developed that are resistant to Dutch elm disease.

There are two species of ash bark beetles in the state that have been a recent cause for concern. These are the **eastern ash bark beetle** and the **western ash bark beetle.** The eastern species is widespread in Kansas, while the western species is, at present, only known in the Wichita area.

In recent years the eastern species seems to have become more aggressive and has been responsible for the death and decline of many ash trees across the state. Especially hard hit has been southeast Kansas.

Most of the problems seem to be in the urban setting or at sites that are marginally suited for ash. Many ash trees seem to do well when first planted but after several years are attacked by bark beetles. Ash prefer moist areas. When planted in upland areas they become stressed as they grow older, inviting attack by bark beetles.

The **shothole borer** is a small shiny beetle that attacks cherries and other fruit trees. So many beetles may attack a tree that it will appear to have been shot with a shotgun. Sometimes the beetles can be seen in the holes.

One last beetle to watch for is the **hickory bark beetle**. This beetle has recently been found in Kansas and is reported to be the most serious pest of hickory in the United States. So far, this insect is only known to be in Cherokee County.

How the Kansas Noxious Weed Law Applies To Nurseries

The Kansas Noxious Weed Law was enacted in 1937, putting the responsibility to control any weeds declared noxious by the Legislature on the landowner, both public and private. Since then several sections have been added to the law to prevent the spread of noxious weeds, including K.S.A -1326, which makes it unlawful to sell any nursery stock infested with a noxious weed or its seed.

Field bindweed flower

The Legislature has declared 12 weeds noxious statewide and two county-option weeds. **The following are the most notable noxious weeds on the list: Field bindweed**, the state's number one noxious weed, is a perennial vine with opposite leaves and white flowers. **Musk thistle** is a large biannual weed that spends its first year as a rosette and bolts in the spring with large purple flowers. **Sericea lespedeza** is a perennial legume with baseball bat shaped leaves and small white flowers with purple throats. **Canada thistle** is a smaller perennial thistle that reproduces with seeds and rhizomes. It is a dioecious, meaning that it has separate male and female plant. When both sexes are present; it will produce seed that blows in the wind.

Canada thistle

Selling any plant with viable noxious weed plant material or seeds is in violation of the Kansas Noxious Weed Law. Please contact Plant Protection and Weed Control or your local county weed department with any noxious weed identification or control questions.

1000 Canker Disease of Walnut – Alert

We are asking nurserymen, landowners, arborists and others in Kansas to be on the alert for a new disease of walnut. We need your assistance in early detection of this disease, which could threaten black walnuts in the native woodlands, planted woodlots and landscape. The disease may enter Kansas by the natural movement of the bark beetle or by human activity. This activity could be in the form of firewood movement, nursery stock or other movement of untreated wood or logs. Western Kansas is at highest risk. Please report suspects.

Walnut twig beetle, side view. *Photograph by Jim LaBonte, Oregon Department of Agriculture*.

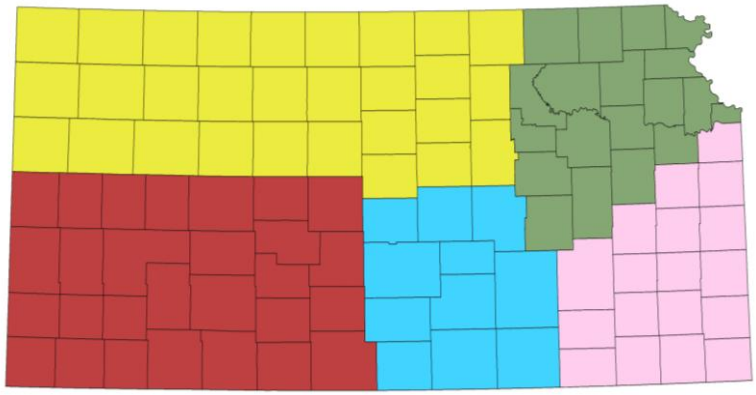
- The disease is caused by a fungus, *Geosmithia*.
- It is transmitted by the walnut bark beetle.
- Look For: Upper crowns yellowing and thinning, then branches die and the entire tree may suddenly wilt and die. Small black cankers are just under the bark with insect galleries.
- Trees die after three years from initial symptoms.
- Control is by early removal and destruction of wood.
- The disease is found in states west of Kansas, including Colorado and New Mexico.

Trapping

Traps for **emerald ash borer** will be set again this year. The Kansas Department of Agriculture and USDA will each set 100 traps through the summer, mostly at lakes, event areas and campgrounds.

Emerald ash borer has been found in the southeastern part of Missouri, near the Wisconsin and Minnesota border in Wisconsin and in St. Paul, Minnesota, as of May 15. Both finds are at least 5-6 years old. **Watch for these symptoms in ash trees: canopy dieback beginning in the top one-third of the canopy, sprouting from the base of the tree and trunk, bark splitting, serpentine galleries below the bark, D-shaped exit holes and increased woodpecker activity.**

Area Staff



Northwest Kansas
Bob Buhler
1585 Road P
Moreland, KS 67650
(785) 627-3574
(785) 207-1507 (M)
bob.buhler@kda.ks.gov

Southwest Kansas
Terry Clarkson
20416 Hwy 50
P.O. Box 193
Cimarron, KS 67835
(620) 855-2403
(785) 256-3849 (M)
terry.clarkson@kda.ks.gov

Northeast Kansas
Tom Sanders
P.O. Box 19282
Forbes Field, Bldg. 282
Topeka, KS 66619
(785) 862-2180
(785) 207-0582 (M)
tom.sanders@kda.ks.gov

Southeast Kansas
Kitty Crooks
6080 Washington Ave.
Parker, KS 66072
(785) 207-0583 (M)
kitty.crooks@kda.ks.gov

South Central
Cherie Copeland
2728 W. 17th St.
Wichita, KS 67203
(316) 943-0438
(785) 207-0580 (M)
cherie.copeland@kda.ks.gov

State Specialists

Bill Scott
Program Manager
P.O. Box 19282
Forbes Field, Bldg. 282
Topeka, KS 66619
(785) 862-2180
(785) 207-2118 (M)
bill.scott@kda.ks.gov

Jon Appel
Plant Pathologist
1711 Westbank Way
Manhattan, Ks 66503
(785) 537-3155
(785) 564-0071 (M)
jon.appel@kda.ks.gov

Glenn Salsbury
Entomologist
105 S. Dittman
Frontenac, KS 66763
(620) 230-0843
(785) 207-0584 (M)
glenn.salsbury@kda.ka.gov

Jeff Vogel
Weeds Specialist
P.O. Box 19282
Forbes Field, Bldg. 282
Topeka, KS 66619
(785) 862-2180
(785) 207-0586 (M)
jeff.vogel@kda.ks.gov

Laurinda Ramonda
CAPS Coordinator
P.O. Box 19282
Forbes Field, Bldg. 282
Topeka, KS 66619
(785) 862-2180
laurinda.ramonda@kda.ks.gov

Sarah Bailey
Administrative Assistant
P.O. Box 19282
Forbes Field, Bldg. 282
Topeka, KS 66619
(785) 862-2180
sarah.bailey@kda.ks.gov

Retired Area Staff

Bill Hilbert, area specialist for the Kansas Department of Agriculture for more than 34 years, retired in March. Mr. Hilbert was an organizer of the Central Chapter of the Horticulture Inspectors Society and one of the authors of the Horticultural Inspectors Guide. He was the recipient of the Carl Carlson Award, an award presented by his peers for his contribution to the profession. Bill was always willing to share his knowledge with the master gardeners and entomology classes at KSU and the Johnson County Community College. He judged 4-H entomology projects at county fairs and the state fair. His expertise and enthusiasm for the job will be missed.

Kansas Department of Agriculture
Plant Protection and Weed Control
Forbes Field-Building 282
PO Box 19282
Topeka, KS 66619-0282

First Class